

WHAT IS CLAIMED:

1. Configuration of a passenger car comprising:

a dashboard installed between a front of the car and the passenger compartment;

at least two front longitudinal beams that are connected to the dashboard at a distance from each other;

lateral exterior frontwalls,

a floor and upright A-columns,

wherein a support beam structure is provided in an area of the dashboard by means of which the front longitudinal beams are connected as power transmitters to the upright A-columns, the frontwalls, the dashboard and the center tunnel,

wherein the beam structure is formed by a rigid tubular frame which is installed at the passenger compartment facing side of the dashboard, said tubular frame being connected at least with the dashboard the A-columns and the frontwalls.

2. Configuration according to Claim 1, wherein the tubular frame comprises:

a horizontally-aligned cross tube formed in one or several parts;

a central support tube supporting the cross tube; and

lateral support tubes supporting the cross tube.

3. Configuration according to Claim 1, wherein the tubular frame is produced from high-rigidity material.
4. Configuration according to Claim 2, wherein the tubular frame is produced from high-rigidity material.
5. Configuration according to claim 2, wherein the cross tube comprises a transverse running center part and inclined side parts.
6. Configuration according to Claim 5, wherein the center part and the inclined side parts of the cross tube are formed in one piece.
7. Configuration according to Claim 5, wherein the center part and the two side parts are formed by separate tubes, which are firmly connected with each other in common connecting areas.
8. Configuration according to Claim 7, wherein the center part and the side parts of the cross tube exhibit different dimensions.
9. Configuration according to Claim 8, wherein the two side parts exhibit a smaller cross section and a smaller building height than the center part .

10. Configuration according to claim 5, wherein the side parts are lead through openings in the center part and reach into the interior of the center part.

11. Configuration according to claim 6, wherein the side parts are lead through openings in the center part and reach into the interior of the center part .

12. Configuration according to claim 7, wherein the side parts are lead through openings in the center part and reach into the interior of the center part.

13. Configuration according to claim 5, wherein, in common connecting areas of the side parts with the center part, respective cast nodes are seated into the center part, which on the one hand, nest with the side part and which, on the other hand, are nested in a form-fitting manner in the center part.

14. Configuration according to claim 6, wherein, in common connecting areas of the side parts with the center part, respective cast nodes are seated into the center part, which, on the one hand, nest with the side part and which, on the other hand, are nested in a form-fitting manner in the center part.

15. Configuration according to claim 7, wherein, in common connecting areas of the side parts with the center part, respective cast nodes are seated into the

center part, which, on the one hand, nest with the side part and which, on the other hand, are nested in a form-fitting manner in the center part.

16. Configuration according to claims 13, wherein the cast nodes locally exhibit stiffening ribs and lengthwise seat sections for the side parts.

17. Configuration according to claims 13, wherein the respective cast nodes are welded to the center part, and wherein the side parts, which are seated in the respective cast nodes, are welded to the respective cast node and the center part.

18. Configuration according to claim 2, wherein, at the dashboard, a transverse running step- or recess-shaped seat is provided, into which seat the cross tube reaches at least in sections.

19. Configuration according to claim 2, wherein the cross tube is lead with its lateral ends through openings of the respective A-columns, and is firmly connected with an A-column reinforcement in an interior of the A-column.

20. Configuration according to claim 2, wherein the lateral support tubes are aligned in a lengthwise vehicle direction, and completely extend inside of the A-columns or the frontwalls).

21. Configuration according to claim 2, wherein each lateral support tube comprises a vertically upward reaching front end area, an approximately horizontally aligned rear end area, and an inclined center area which connects the two end areas with each other.
22. Configuration according to claim 21, wherein the vertically-aligned front end area of the support tube is connected with an interior A-column reinforcement, whereas the other horizontally extending end area of the support tube is connected with an interior frontwall reinforcement.
23. Configuration according to claim 2, wherein the lateral support tubes exhibit an oval cross section.
24. Configuration according to claim 21, wherein the lateral support tubes exhibit an oval cross section.
25. Configuration according to claim 2, wherein the cross tube and the central support tube exhibit a polygonal cross section.
26. Configuration according to claim 21, wherein the cross tube and the central support tube exhibit a polygonal cross section.

27. Configuration according to claim 2, wherein the central support tube is, on the one hand, firmly connected with the cross tube and, on the other hand, with a placed-on tunnel reinforcement.

28. Configuration according to claim 25, wherein the central support tube is, on the one hand, firmly connected with the cross tube and, on the other hand, with a placed-on tunnel reinforcement.

29. Configuration according to claim 1, wherein the front longitudinal beams are connected as power transmitters with each other via a front hollow-beam-type cross member and another cross member which is connected to a bulkhead.

30. Configuration according to claim 2, wherein the front longitudinal beams are connected as power transmitters with each other via a front hollow-beam-type cross member and another cross member which is connected to a bulkhead.

31. Configuration according to claim 29, wherein the interior support sections of the lower front longitudinal beams are formed in tailored blank construction, whereby the thickness of the wall of the support sections increases towards the dashboard.

32. Configuration according to claim 30, wherein the interior support sections of the lower front longitudinal beams are formed in tailored blank construction, whereby the thickness of the wall of the support sections increases towards the dashboard.

33. A method of making the configuration of claim 1, comprising welding the tubular frame parts together.

34. A method of making the configuration of claim 13, comprising welding the cast node to the center part and the side part.

35. A beam structure for a passenger vehicle of the type having a dashboard installed between an end of the vehicle and a passenger compartment, and A-columns at opposite lateral sides of the dashboard, said beam structure including a rigid tubular frame installed at a passenger compartment facing side of the dashboard, said tubular frame being connected with the dashboard and the A-columns.

36. A beam structure according to claim 35, wherein the tubular frame comprises:

- a horizontally-aligned cross tube formed in one or several parts;
- a central support tube supporting the cross tube; and
- a lateral support tubes supporting the cross tube.

37. A beam structure according to claim 36, wherein the cross tube comprises of a transverse running center part and inclined side parts.

38. A beam structure according to claim 37, wherein, in common connecting areas of the side parts with the center part, respective cast nodes are seated into the center part, which, on the one hand, nest with the side part and which, on the other hand, are nested in a form-fitting manner in the center part.

39. A beam structure according to claim 38, wherein the respective cast nodes are welded to the center part , and wherein the side parts, which are seated in the respective cast nodes , are welded to the respective cast node and the center part .

40. A method of making a beam structure according to claim 38, comprising welding the support tubes and cross tube together.